## REMARKS

The undersigned wishes to thank Examiner Frenel for the courtesies extended to the inventors, Samarth Sarthi and Vishy Visweswaran, and the undersigned, during the personal interview conducted on September 3, 2008.

Claims 42-58 are currently pending. New claims 57 and 58 reflect the subject matter of dependent claim 49, but as a new claim set not including all the details of independent claim 42 as presented above. Reconsideration of the present application is respectfully requested.

The claims have been extensively amended to more accurately reflect the disclosed invention and for uniformity of language. For instance, the independent claims have been amended to reflect that the "process" is meant to convey processes such as a supply-chain or part thereof. Specifically, the process is now positively recited as being a series of activities wherein subsequent activities are dependent on a result of at least one previous activity. Hence, in a supply chain for example, where activities tend to be sequential (though some can be in parallel), subsequent activities tend are dependent upon the results of previous activities. In re-reading the specification, it is believed that this fundamental concept of the present disclosure was not previously reflected in the arguments or the claims, but does represent a strong patentable feature and value proposition of the overall disclosed method and system, as reflected with greater detail in the response to the rejection, below.

The Office Action of April 7, 2008 includes a rejection of claims 42-56 under 35 U.S.C. § 103 as allegedly being unpatentable over Morgan et al. (U.S. Patent No.

5,799,286), in view of Ulwick (U.S. Patent No. 6,115,691), and in further view of Bruce (U.S. Published Patent Application No. 2002/0049621). This rejection is respectfully traversed.

To frame the arguments, each of the applied references necessarily must be described separately. However, the arguments are directed to the combination of references.

Morgan is directed to an automated activity-based management system. More specifically, it is an example of an automated, activity-based management system in which traditional ledger accounting information and human resources information is used with other information directed to activities, equipment usage, and facility utilization to generate costs associated with activities performed by an organization, as described in the first two pages of the originally filed application. The traditional accounting information and activity information are fed into a relational database. The information is processed and the costs associated with the employee, facilities, equipment and overhead components of activities are computed. User-defined reports for trending, forecasting, comparison, benchmarking and budgeting processes can be generated.

As characterized in the Office Action, Morgan does not "explicitly disclose that the method [has a step of] establishing a relationship between various drivers by representing each non-bridge variable driver in terms of one or more of said bridge variables only; using said relationship, representing each of said activities at least as a function of one or more of said bridge variables, thereby reflecting interdependence between said activities; and generating a model of said process at least as a function of said bridge variables by combining representations of all

activities comprising said process." The Office suggests that these features are known in the art as evidenced by Ulwick (and presumably Bruce).

Specifically, the Office suggests that Ulwick discloses a method of "establishing a relationship between various drivers by representing each non-bridge variable driver in terms of one or more of said bridge variables only," citing to column 1, lines 41-67, column 2, lines 1-12, column 3, lines 27-67, and column 9, lines 5-17.

The undersigned has read Ulwick in detail and respectfully submits that it, whether viewed alone or in combination with Morgan and Bruce, does not teach the features for which it is asserted and which now appear in the claims. Specifically, Ulwick is described as providing individuals and businesses with the ability to evolve decision making by taking into account more variables that affect a decision. It does not specifically address a supply-chain environment or any process as defined in the claims, *i.e.,* a process being a series of activity wherein an input of at least one subsequent activity is dependent on a result of at least one previous activity. By way of non-limiting example of the present disclosure, this process can involve loading a truck with produce, delivering the produce via the truck, unloading the produce at the delivery point, and utilizing the produce at the delivery point. In marked contrast, as shown in the various figures of Ulwick, a group of desired outcomes are identified, *e.g.,* having a two-way portable radio that can "maintain a charge for a full day of activity" being identified as a target benefit. This benefit is then weighted against other types of desires such as shown in Figures 5 and 6, for instance. Figure 6 mentions the use of "predicted matrices", which are described for instance at page 6, lines 58-63 and in great detail starting at column 16, line 16 *et seq.* Specifically,

column 16 identifies a finite set of predicted matrices for a given application. More specifically, it is stated that:

> Predictive metrics are measurable parameters that predict a desired outcome with occur. A single predictive metric is defined for each desired outcome; however, as each metric may predict, to some extent, the satisfaction of more than one desired outcome, each metric is assigned a predictive relationship value for each desired outcome depending upon the degree with which that metric predicts satisfaction of that particular desired outcome. Accordingly, each predictive metric is also assigned a cumulative predictive value which represents the strength of the predictive metric with which represents the strength of the predictive metric with respect to the degree to which the predictive metric predicts satisfaction of all of the prioritized desired outcomes.
>
> The predictive metrics are formulated by market or industry research, and, once formulated, are organized into a computer database. Once collected and organized, the data is loaded into the software prior to delivery to the user. FIG. 19 illustrates actual data wherein desired outcomes are listed down the left hand column (nos. 1-26) and corresponding predictive metrics are listed from left to right across the top (nos. 1-26). This data was obtained for an internal customer set (management) in connection with a mission involving the process of business. Note as seen in FIG. 19 for each desired outcome there is a corresponding predictive metric established which strongly predicts (strength of prediction indicated by solid circle) delivery of the desired outcome. In addition each metric is assigned a predictive value relative to each desired outcome. In the data shown in FIG. 19 the ability of each predictive metric to predict the success of each desired outcome is indicated by strong, moderate, and weak indicators which are graphically represented by a solid circle, a circle, and a triangle respectively, which correspond to numerical values (9, 3, and 1, respectively)."

What is interesting to note about this description, particularly in the context of the overall disclosure in Ulwick, is that the predictive matrices may be used for predicting the desired outcome in some weighted fashion, but each predictive

matrices is used for a direct correlation to the desired outcome. Stated differently, the predictive matrices can have a one-to-several correlation, but it is a direct correlation between the predictive matrix and the desired outcome. In notable contrast, the present application discloses a system where drivers associated with activities can have an established relationship based on "bridge variables," that is variables that are shared among drivers, with a patentable difference between the present method and system and the applied art being that the bridge variable is usable in sequential activities. For instance, using part of the example in the present specification, the average volume of cases (*e.g.*, cases of produce) can be used to identify cost of various activities, wherein the activities are each dependent on a previous activity, such as in a supply-chain environment.

For instance, the variable d can be used in the variable costs VC and fixed costs FC of transportation, but also in inventory storage and other components of a supply chain. As identified at page 10 of the original disclosure, these fixed and variable costs of can be added up to determine the total costs of a supply chain, for example. The various bridge variables can then be manipulated to determine if the total costs, taking into consideration other constraints, for instance, can be optimized.

To put it in more abstract sense, Ulwick only takes into consideration a single cause and effect sequence, i.e., a flat, one dimensional evaluation, wherein the disclosed process of the present application can take into consideration a sequence of causes and effects, particularly ones that have common variables or bridge variables, to derive the total cost of a sequence of such cause and effect activities, a multi-dimensional evaluation.

It is respectfully submitted that this distinction is reflected in the independent claims when one reads the claims in their entirety. For instance, claim 42 recites:

> A computer-implemented method of managing a process, said computer implemented method comprising:
> identifying activities that comprise the process, wherein the process is a series of activities, wherein an input of at least one subsequent activity is dependent on an output of at least one previous activity;
> identifying drivers associated with at least one metric, reflecting an efficiency of said process, for each of the activities;
> *identifying bridge variables from said identified drivers, wherein each bridge variable is a driver that is relevant to more than one of said activities*;
> *establishing a relationship between various drivers by representing at least one non-bridge variable driver in terms of one or more of said bridge variables;*
> *using said relationship, representing activities at least as a function of one or more of said bridge variables, thereby reflecting interdependence between said activities to represent the entire series of activities of said process;*
> *generating a model of said process at least as a function of said bridge variables by combining representations of activities comprising said process*; and
> outputting, from said model, a predictive metric reflecting an efficiency of the total process.

Here, it should be noted that cost may not be the metric to be optimized, but the overall system is to optimize a metric reflecting an efficiency of the total process, and the model is of the process of this series of activities wherein subsequent activities are dependent on a result of at least one previous activity, such as is evident in a supply chain environment.

In this manner, the complex and seemingly unmanageable and unpredictable complexities of a supply chain can be quantified to result in an optimized parameter such as costs for the total system. Previously, as described in the present application, these decisions were localized. The same is true of Ulwick where the weighted results are decided by various individuals as to their prospective and

weighted. Ulwick purports to give a measure of all these parameters together in some form of graphic, and Ulwick does not reflect a complexity of having a bridge variable that affects activities, wherein the activities can be dependent on previous activities such that there is a two-dimensional complexity, *e.g.,* the bridge variable being one complexity and the interdependency of subsequent and/or former steps being another complexity, is neither anticipated nor suggested, nor is there any reason to think that one skilled in the art would modify the applied art in a manner to reflect this feature. Both the features of the present claims and the potential advantages it can produce in certain scenarios are not appreciated and not captured by the prior art. Stated differently, the present invention is both novel and unobvious over the applied art.

The dependent claims add features which further remove the present invention from the prior art. By way of example, new independent claim 57, recites *inter alia,* "identifying drivers associated with at least one metric, reflecting an efficiency of said process, for each of the activities, wherein identifying said drivers includes identifying at least one of fixed components and variable components of each said driver", and dependent claim 49 has similar recitations. Fixed costs and variable costs are common accounting numbers, but the prior art does not use fixed and variable components (e.g., costs per claim 58) with reference to individual cost drivers. Col. 17, lines 30-43, of Ulwick is cited for meeting the recitations of claim 49, but this passage mentions that a universe of solutions is treated as a variable, but it is respectfully submitted that this concept does not meet the present claim recitations. Morgant et al. identifies that total cost attributable to an activity has four components, at column 5, lines 51-55, but the people, facilities, equipment and

overhead, each have fixed and variable costs, and Morgan et al. does not go to this level of detail.

It is noted that Bruce was added for allegedly providing evidence that the step of outputting, from a model, a predictive cost for a process, is known in the art. Even if this were the case, it is respectfully submitted that the combination of Ulwick, Morgan and Bruce does not teach or suggest the present invention for at least the reasons given above.

In light of the foregoing, Applicants respectfully request reconsideration and allowance of the above-captioned application. Should any residual issues exist or arise, the Examiner is invited to contact the undersigned at the number listed below.

Respectfully submitted,

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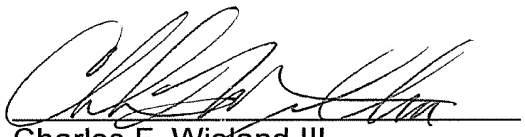
Date: September 4, 2008 By: 

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